

AMENDMENT

Please make the following amendments:

In the Specification:

On page 1, line 9, please add the following: -- [The present application is a continuation of co-pending U.S. Patent Application Serial No. 08/940,553 filed January 31, 2000 entitled, "Pointing Device with Biometric Sensor," which is a continued prosecution application (CPA) of U.S. Patent Application Serial No. 08/940,553 filed on September 30, 1997 (abandoned) and having the same title. Pending Application Serial No. 08/940,553 is incorporated herein by reference in its entirety. --

In the Claims:

Please cancel claims 3-6 and 25-48 without prejudice or disclaimer.

1. (Amended) A pointing device comprising:

- an interface for operably communicating with an electronic system;
- a position sensor, responsive to user movement thereof, for conveying [user] positional information by way of said interface to the electronic system;
- a user-depressable button for conveying [user] selection information by way of said interface to the electronic system; [and]
- a biometric sensor disposed at a location such that when operating said pointing device in a normal manner a user's hand rests naturally in a position to place a finger of the user's hand in proximity to and readable by said biometric sensor[, said location equally well suitable for use by either a right-handed or a left-handed user.]; and
- a verification system for operably communicating with the electronic system, the verification system comprising a user storage, an authorization profile storage, and an audit log storage, the audit log storage being configured to store user identification information from said biometric sensor in response to an unsuccessful transaction attempt and denial of access with said electronic system.

A₂ 2. (Amended) A pointing device as recited in claim 1, wherein the biometric sensor comprises a fingerprint sensor [for conveying information associated with the user's identity to the computer system].

7. (Amended) A pointing device as recited in claim [6] 1, wherein said biometric sensor is configured to convey [the attributes of the user's fingerprint comprises] a digitized scanned image of the user's fingerprint to said electronic system.

A₃ 8. (Amended) A pointing device as recited in claim [6] 1, wherein said biometric sensor is configured to convey [the attributes of the user's fingerprint comprises] a compressed digital representation of the user's fingerprint to said electronic system.

9. (Amended) A pointing device as recited in claim [6] 1, wherein said biometric sensor is configured to convey [the attributes of the user's fingerprint comprises] a digital representation of a minutia of the user's fingerprint to said electronic system.

A₄ 18. (Amended) A pointing device as recited in claim [16] 1, wherein the position sensor comprises a trackball that is movably-connected to the pointing device so that the trackball is [to be] positionable to either side of the [fingerprint sensor] biometric sensor so that the pointing device is equally well suitable for use by either a right-handed or a left-handed user.

Please add the following new claims:

-- 49. A pointing device as recited in claim 1, wherein the user storage, the authorization profile storage, and the audit log storage comprise one or more memory devices.

A₅ 50. The pointing device of claim 49, wherein the one or more memory devices comprise a CD-ROM, a magnetic disk, an optical disk, or a flash memory.

51. The pointing device of claim 1, wherein the user storage, the authorization profile storage, or the audit log storage comprise a removable memory device.

52. The pointing device of claim 1, wherein the user storage, the authorization profile storage, or the audit log storage store encoded information.

53. The pointing device of claim 1, wherein the authorization profile storage stores permissible dates, times, functions, transactions, or any combination thereof associated with a user of said electronic system.

54. The pointing device of claim 1, wherein the audit log storage stores transaction information for a user who successfully accessed said electronic system.

55. The pointing device of claim 1, wherein the audit log storage stores a record of successful and unsuccessful system accesses to said electronic system.

56. The pointing device of claim 1, further comprising a substance detection sensor in operative relation with the biometric sensor.

57. The pointing device of claim 56, wherein the substance detection sensor detects narcotics, blood alcohol content, or any combination thereof of the user.

58. The pointing device of claim 57, wherein the verification system is configured to authorize or prevent access to the electronic system according to the user's blood alcohol content.

59. The pointing device of claim 56, wherein at least a portion of the substance detection sensor overlaps the biometric sensor.

60. The pointing device of claim 1, further comprising one or more additional biometric sensors in operative relation with the user and coupled to said interface.

61. A pointing device comprising:

- an interface for operably communicating with an electronic system;
- a position sensor, responsive to user movement thereof, for conveying positional information by way of said interface to the electronic system;
- a user-depressable button for conveying selection information by way of said interface to the electronic system; and
- a biometric sensor disposed at a location such that when operating said pointing device in a normal manner a user's foot rests naturally in a position to place a toe of the user's foot in proximity to and readable by said biometric sensor; and
- a verification system for operably communicating with the electronic system, the verification system comprising a user storage, an authorization profile storage, and an audit log storage, the audit log storage being configured to store user identification information from said biometric sensor in response to an unsuccessful transaction attempt and denial of access with said electronic system.

62. A pointing device comprising:

- a base;
- a trackball mounted upon the base; and
- an upper section having a left and a right side, said upper section moveably connected to the base such that the trackball is positionable adjacent said left or said right side, said upper section including at least one button formed substantially on a top surface of the upper section.

63. A pointing device as in claim 62 wherein:

- the base is substantially circular in shape when viewed from above, thus having a generally circular perimeter; and
- the trackball is mounted off-center on the base at a location intersecting the generally circular perimeter.

64. A pointing device as in claim 62 wherein the upper section is rotatably-connected to the base.

65. A pointing device as in claim 62 wherein the upper section comprises one or more buttons.

66. A pointing device as in claim 65 wherein:

when the upper section is rotated such that the trackball is located adjacent the left side, a right-handed user's hand, when operating the device in a normal manner, rests naturally in a position to place a finger of the user's right hand in proximity to one or more of the buttons and the user's right thumb in a position to move the trackball; and

when the upper section is rotated such that the trackball is located adjacent the right side, a left-handed user's hand, when operating the device in a normal manner, rests naturally in a position to place a finger of the user's left hand in proximity to one or more of the buttons and the user's left thumb in a position to move the trackball.

67. A computer verification system for use with a biometric sensor, said verification system comprising:

a processor coupled to the biometric sensor; and

a memory coupled to the processor, the memory comprising:

a user storage and an authorization profile being configured to verify an identification of a user each time the user inputs a request to an electronic system; and

an audit log storage being configured to store user identification information from the biometric sensor in response to an unsuccessful transaction attempt and denial of access with the electronic system.

68. The verification system of claim 67, wherein the memory comprises a CD-ROM, a magnetic disk, an optical disk, or a flash memory.

69. The verification system of claim 67, wherein the memory comprises a removable memory device.

70. The verification system of claim 67, wherein the memory stores encoded information.

71. A method for verifying a user of an electronic system coupled to a biometric sensor, the method comprising:

obtaining user identification information of the user with the biometric sensor;
obtaining a selection of the user for the electronic system;
comparing the user identification information with information stored in a user storage;
comparing the selection with authorization information stored in an authorization profile;
determining if the user is authorized to perform the selection; and
storing identification information and attempted transaction information of the user in the audit log storage if the user is not authorized to perform the selection and is denied access to the electronic system.

72. The method of claim 71, wherein the authorization information comprises permissible dates, times, functions, transactions, or any combination thereof associated with the user.

73. The method of claim 71, wherein storing identification information or storing transaction information comprises storing encoded information.

74. The method of claim 71, wherein the authorization information stored in the authorization profile is stored by one or more persons other than the user.

75. The method of claim 71, further comprising detecting a substance of the user with a substance detection sensor to determine if the user is authorized to access the electronic system.

76. The method of claim 75, wherein the substance comprises a narcotic or alcohol.

77. The method of claim 71, further comprising detecting a substance of the user with a substance detection sensor to determine if the user is authorized to perform the selection.

78. The method of claim 77, wherein the substance comprises a narcotic or alcohol. --

79. A verification system for operably communicating with an electronic system, the verification system comprising a user storage, an authorization profile storage, and an audit log storage, the audit log storage being configured to store information in response to a successful transaction attempt and grant of access with said electronic system and to an unsuccessful transaction attempt and denial of access with said electronic system.

80. The verification system of claim 79, wherein the information comprises digital information.

81. The verification system of claim 79, wherein the information comprises encoded information.

REMARKS

A. Status of the Claims

Claims 3-6 and 25-48 have been canceled without prejudice or disclaimer. Claims 1, 2, 7-9, and 18 have been amended. Claims 49-81 have been added. No new matter has been added.

B. Section 103 Rejections – Matchett and Lemelson

In the Office Action mailed February 29, 2000, the Examiner maintained rejections for certain pending claims while lodging new rejections based upon Matchett and Lemelson (U.S. Patent No. 5,202,929). The Office argued that Lemelson taught the features of Applicant's "verification system," recited in at least claim 1 and that a combination with Matchett would render the subject matter of the claims obvious. Applicant respectfully traverses.